What is claimed is:

- 1. A process for electroless copper plating comprising:
- 1) depositing a palladium on a resin substrate; and
- 2) treating the resin substrate with a formaldehyde-free electroless copper plating solution, which solution comprises a copper ion and a reducing agent and, wherein no catalyst accelerating treatment is carried out after performing said catalyst depositing treatment.
- 2. The process of claim 1 wherein the palladium catalyst is a palladium-tin catalyst.
- 3. The process for electroless copper plating according to claim 1 or 2 wherein the electroless copper plating solution further comprises a complexing agent.
- 4. The process for electroless copper plating according to any one of claims 1 through 3 wherein the reducing agent is selected from a group consisting of sodium boron hydride, potassium boron hydride, dimethylamino borane, trimethylamino borane, hydrazine, derivatives of these compounds and a mixture thereof.
- 5. The process for electroless copper plating according to any one of claims 1 to 4, wherein the electroless copper plating solution further comprises a water-soluble cerium compound, a water-soluble thallium and/or a water-soluble

sulfide.

- 6. The process for electroless copper plating according to any one of claims 1 to 5, wherein the electroless copper plating solution further comprises iodine and/or a water-soluble iodine compound.
- 7. The process for electroless copper plating according to any one of claims 1 to 6, wherein the electroless copper plating solution further comprises hydantoin and/or a hydantoin derivative.
- 8. The process for electroless copper plating according to any one of claims 1 to 7, wherein the deposition rate of copper is 0.05 micrometer/minute or more.
- 9. An electroless copper plating solution used in the process for electroless copper plating according to any one of claims 1 to 8.
- 10. An electroless plating system, comprising a resin substrate disposed in a plating solution of claim 9.
- 11. A composite material prepared by the process according to any one of claims 1 to 8.
- 12. The composite material according to claim 11, wherein the thickness of the copper layer deposited on the resin substrate is 0.05 micrometer or more.

- 13. A process for electro plating copper characterized by further applying an electro copper plating on the composite material according to claim 11 or 12.
- 14. A composite material prepared by the process in accordance with claim 13.